

LISTING OF CLAIMS

Claim 1 (previously presented): An isolated polynucleotide comprising:

- (a) a nucleotide sequence encoding a polypeptide having lipoxygenase activity, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:16 have at least 80% sequence identity based on the Clustal alignment method, or
- (b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence contain the same number of nucleotides and are 100% complementary.

Claim 2 (previously presented): The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:16 have at least 85% identity based on the Clustal alignment method.

Claim 3 (previously presented): The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:16 have at least 90% identity based on the Clustal alignment method.

Claim 4 (previously presented): The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:16 have at least 95% identity based on the Clustal alignment method.

Claim 5 (previously presented): The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide comprises the amino acid sequence of SEQ ID NO:16.

Claim 6 (previously presented): The polynucleotide of Claim 1 wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:15.

Claim 7 (original): A vector comprising the polynucleotide of Claim 1.

Claim 8 (original): A recombinant DNA construct comprising the polynucleotide of Claim 1 operably linked to a regulatory sequence.

Claim 9 (original): A method for transforming a cell, comprising transforming a cell with the polynucleotide of Claim 1.

Claim 10 (original): A cell comprising the recombinant DNA construct of Claim 8.

Claim 11 (original): A method for producing a plant comprising transforming a plant cell with the polynucleotide of Claim 1 and regenerating a plant from the transformed plant cell.

Claim 12 (original): A plant comprising the recombinant DNA construct of Claim 8.

Claim 13 (original): A seed comprising the recombinant DNA construct of Claim 8.

Claims 14-20 (cancelled)